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Carina Frazer

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.: 7,285,774	Grant Date: Oct. 23, 2007
Application No.: 10/529,304	Conf. No.: 2126
Inventor: Roger Guevremont	
Title: <b>FAIMS Apparatus and Method for Separating Ions in the Gas Phase</b>	

Commissioner for Patents  
Office of Patent Publication  
ATTN: Certificate of Correction Branch  
P.O. Box 1450  
Alexandria, VA 22313-1450

## TRANSMITTAL

Transmitted herewith are the following documents:

- ☒ Certification of Correction (1 pg.);
- ☒ Copy of excerpt from Response submitted June 5, 2007 (4 pgs.)

Pursuant to 37 C.F.R. §1.322 and MPEP §1480.01, Patentee requests expedited processing and granting of this request for a Certificate of Correction. In support of Patentee's assertion that the error for which correction is sought is solely attributable to the Office, Patentee is submitting herewith a photocopy of the listing of claims submitted with the Response dated June 5, 2007. It may be seen that claim 15 (former claim 16), as submitted, did not contain the error for which correction is sought.

It is believed that no fee is due, however the Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 50-3267.

Dated: October 26, 2008

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Respectfully submitted,

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## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 7,285,774

APPLICATION NO.: 10/529,304

ISSUE DATE : Oct. 23, 2007

INVENTOR(S) : Roger Guevremont

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Claim 15, line 5

replace "different sets of segments of die parallel rods"

with --different sets of segments of the parallel rods--

MAILING ADDRESS OF SENDER (Please do not use customer number below):

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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In Re Patent Application Of: Guevremont

Our File No: 151-216 US/PCT

Application No: 10/529,304

Art Unit: 2881

Filing Date: March 25, 2005

Examiner: Johnston, Phillip A.

Title: FAIMS Apparatus and Method for Separating Ions in the Gas Phase

Conf. No.: 2126

June 5, 2007

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## Amendment

Sir,

This is in response to the Final Office Action mailed on April 6, 2007. Please amend the application, as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 8 of this paper.

Page 1

**Amendments to the Claims**

The listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended) A method of separating ions comprising the steps of:  
    providing an analyzer region that is operable in both an rf-only mode and in a FAIMS mode;  
    introducing ions into the analyzer region;  
    effecting a selective separation of the ions within the analyzer region substantially during operation in the FAIMS mode;  
    controllably switching the analyzer region from the FAIMS mode to the rf-only mode; and,  
    extracting the selectively separated ions from the analyzer region substantially during operation in the rf-only mode.

Claim 2 (original) A method according to claim 1, comprising a step prior to the step of effecting a separation of the ions of: trapping some of the introduced ions within the analyzer region by the application of selected electric potentials at the ends of the analyzer region.

Claim 3 (cancelled).

Claim 4 (previously presented) A method according to claim 1, wherein the analyzer region is provided as a space between a set of parallel rods, the space having first and second ends.

Claim 5 (previously presented) A method according to claim 1, wherein the ions are introduced into the analyzer region substantially during operation of the analyzer region in the rf-only mode.

Claim 6 (original) A method according to claim 5, comprising a step prior to the step of selectively separating ions of: controllably switching the analyzer region from the rf-only mode to the FAIMS mode.

Claim 7 (original) A method according to claim 6, comprising a step prior to the step of controllably switching the analyzer region from the rf-only mode to the FAIMS mode of: collisionally cooling the ions so as to confine the ions within a volume that is smaller than a volume occupied by the ions prior to collisional cooling.

Claim 8 (previously presented) A method according to claim 1, wherein the ions are introduced into the analyzer region substantially during operation of the analyzer region in the FAIMS mode.

Claim 9 (previously presented) A method according to claim 7, comprising a step prior to the step of extracting ions of: collisionally cooling the selectively separated ions.

Claim 10 (previously presented) A method according to claim 9, comprising a step prior to the step of extracting the selectively separated ions of: controllably switching the analyzer region from the rf-only mode to the FAIMS mode, so as to effect a selective second separation of the collisionally cooled selectively separated ions.

Claim 11 (previously presented) A method according to claim 2, wherein the step of extracting the selectively separated ions includes a step of applying a different selected electric potential at the second end of the analyzer region.

Claim 12 (previously presented) A method according to claim 3, comprising a step of providing the extracted selectively separated ions to one of a detector, an analyzer and an ion collector.

Claim 13 (previously presented) A method according to claim 7, comprising a step after the step of extracting the selectively separated ions of: refilling the analyzer region with ions while the analyzer region is operating in the rf-only mode.

Claim 14 (original) A method according to claim 4, wherein the set of parallel rods has a quadrupole configuration.

Claim 15 (original) A method according to claim 14, wherein each parallel rod of the set of parallel rods includes a plurality of coaxially aligned segments.

Claim 16 (previously presented) A method according to claim 15, wherein the selectively separated ions are extracted from the analyzer region as a result of an electric field established within the analyzer region by application of different dc voltages between different sets of segments of the parallel rods.

Claim 17 (previously presented) A method according to claim 1, wherein the gas pressure in the analyzer region is in the range between  $10^2$  torr to  $10^{-6}$  torr.

Claim 18 (previously presented) A method according to claim 1, wherein the gas pressure in the analyzer region is in the range between 10 torr to  $10^{-4}$  torr.

Claim 19 (previously presented) A method according to claim 1, wherein the gas pressure in the analyzer region is in the range between 5 torr to  $10^{-2}$  torr.

Claim 20 (currently amended) An apparatus for separating ions comprising:

a set of parallel rods having a space therebetween, the space having first and second ends and defining an analyzer region; and,

an electrical controller for electrically coupling to the set of parallel rods, for applying a radio frequency (rf)-voltage at least an rf-voltage between the parallel rods of the set of parallel rods in a rf-only first operating mode, [[and]] for applying a combination